



FIG. 1

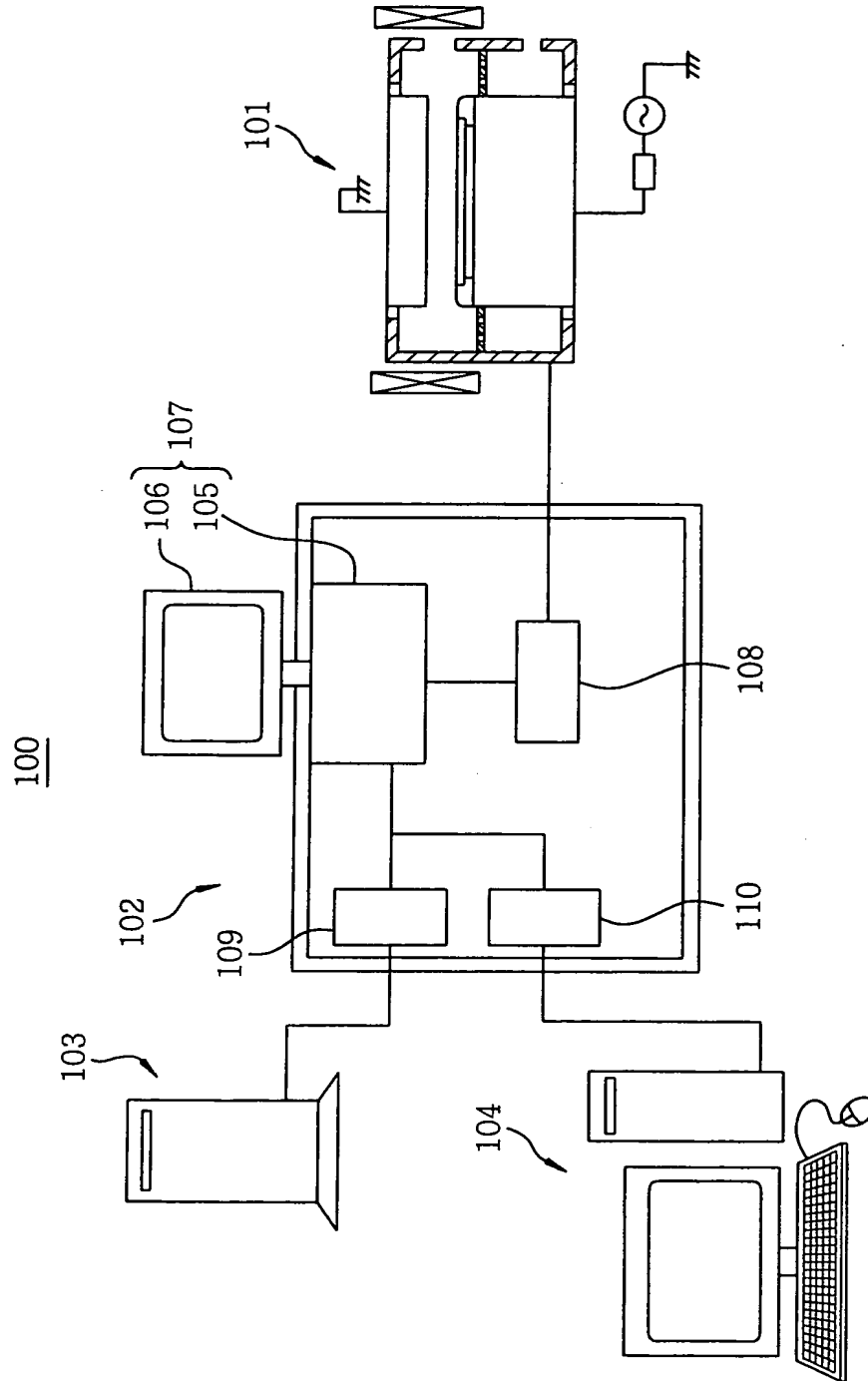


FIG. 2

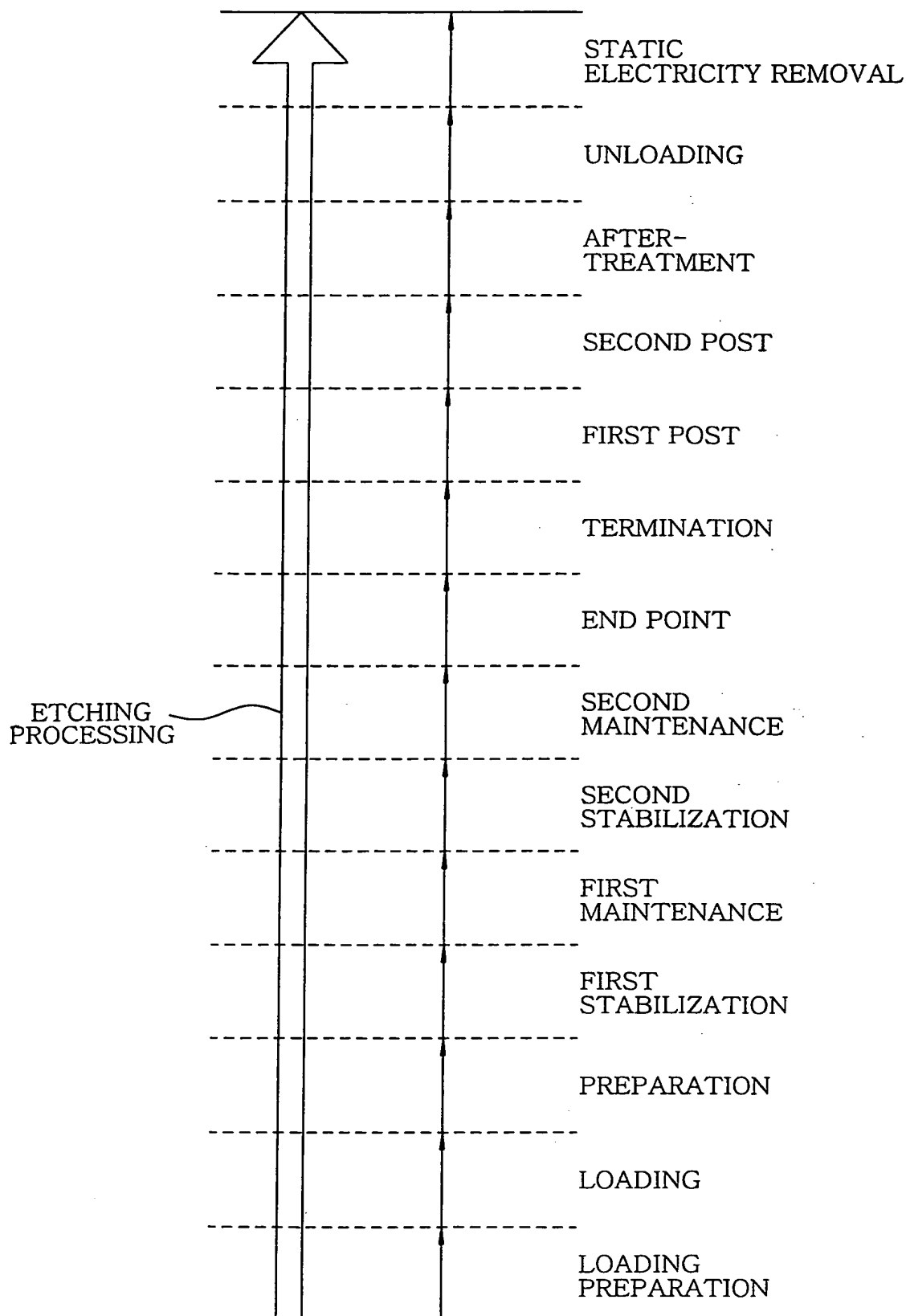


FIG. 3

```
<Command Name="HegasVacuumStart" Category="PREPROCESS-VACUUM" Target="HeGas" Type="Device"/>

<Command Name="HegasVacuumTime" Category="DELAY" Target="Interpreter" Type="Delay">
  <Follow Name="HeGasVacuumStart"/>
  <Argument Name="Water backside pumping time before pressure control" Type="chamberParameter"/>
</Command>

<Command Name="HegasVacuumEnd" Category="OFF" Target="HeGas" Type="Device">
  <Follow Name="HegasVacuumTime"/>
</Command>

<Command Name="ShutterOpen" Category="OPEN" Target="Shutter" Type="Device"/>
<!--LLM-Arm-->
<Command Name="PinUp" Category="UP" Target="Pin" Type="Device">
  <Follow Name="ShutterOpen"/>
</Command>

<!--LLM-Arm-->
<Command Name="PinDown" Category="DOWN" Target="Pin" Type="Device"/>
  <Follow Name="PinUp"/>
</Command>

<Command Name="ShutterClose" Category="CLOSE" Target="Shutter" Type="Device">
  <Follow Name="PinUp"/>
</Command>

<Command Name="PressControlEnd" Category="FULL-OPEN" Target="APC" Type="Device">
  <Follow Name="PinDown"/>
  <Follow Name="ShutterClose"/>
</Command>

<Command Name="N2GasVacuumStart" Category="N2-PURGE-OFF+VACUUM" Target="GasBox" Type="Device">
  <Follow Name="PressControlEnd"/>
</Command>

<Command Name="N2GasVacuumTime" Category="DELAY" Target="Interpreter" Type="Delay">
  <Follow Name="N2GasVacuumStart"/>
  <Argument Name="N2 purge line gas exchanging time" Type="ChamberParameter"/>
</Command>

<Command Name="N2GasVacuumEnd" Category="N2-VACUUM-END" Target="GasBox" Type="Device">
  <Follow Name="N2GasVacuumTime"/>
</Command>

<Command Name="ESCControl" Category="ON" Target="ESC" Type="Device">
  <Follow Name="N2GasVacuumStart"/>
  <Argument Name="ESC Voltage" Type="RecipeItem"/>
</Command>

<Command Name="End" Category="END" Target="Interpreter" Type="End">
  <Follow Name="HegasVacuumEnd"/>
  <Follow Name="N2GasVacuumEnd"/>
  <Follow Name="ESCControl"/>
</Command>
```

FIG. 4

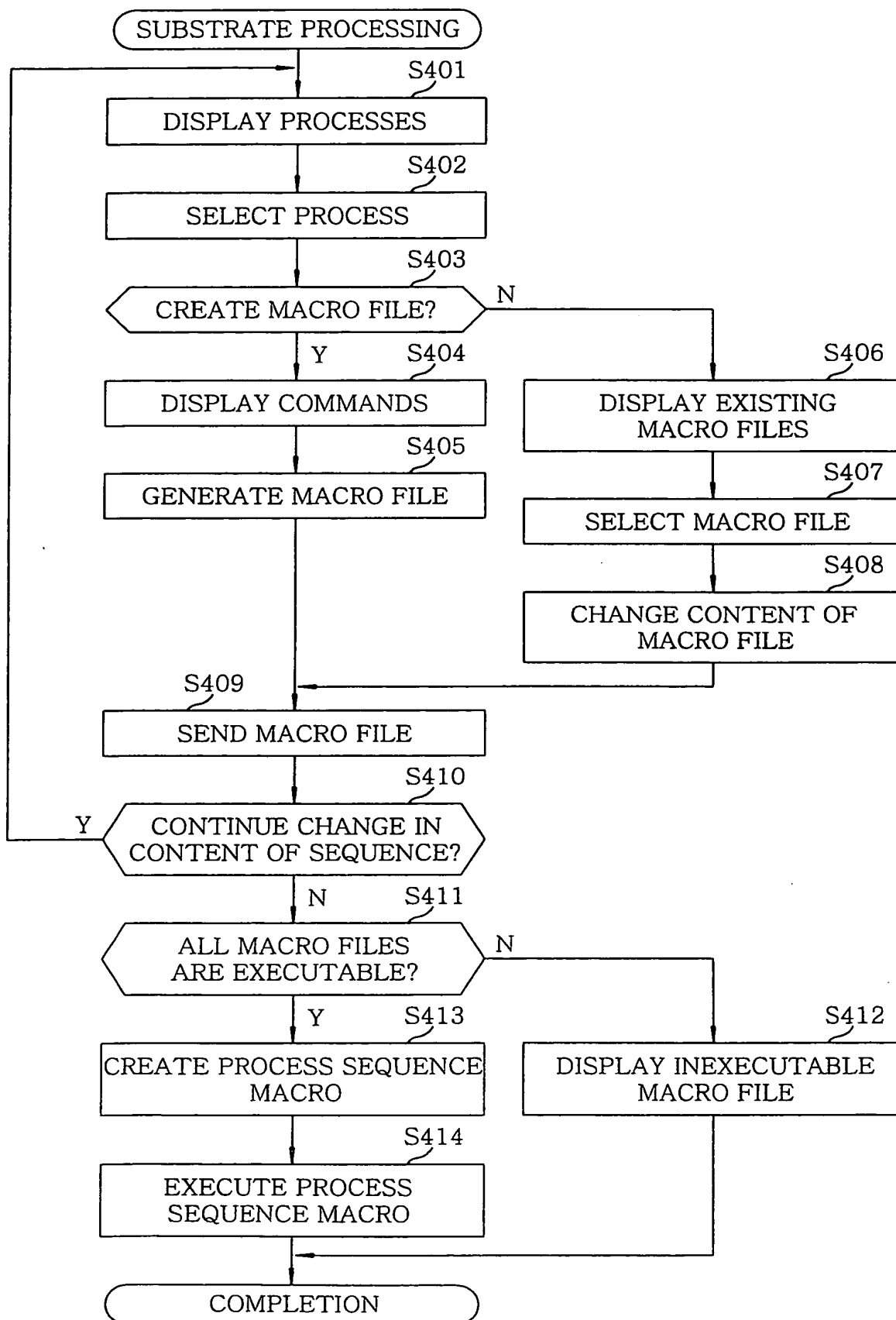


FIG.5

ABSTRACT TABLE	CHECK ITEM	FACTOR LIST	ERROR CODE 1	ERROR CODE 2	ERROR CODE 3	ERROR CODE 4
NMS_ILT_BPC_OUT_VLV2 + + END	BPC OUT VALVE (G82) OPEN INTERLOCK THE PRESENCE OF WAFER + ESC HV OFF, NMF_ILF_ESC_HV_OFF_WAHER THE PRESENCE OF WAFER + ESC VOLTAGE ZERO, NMS_ILF_ESC_VOLT_ ZERO_WAHER		NMS_ILT_BPC_OUT_VLV2	TXT_ERR_BPC	TXT_ERR_OT_VLV	TXT_ERR_OPEN

FIG.6

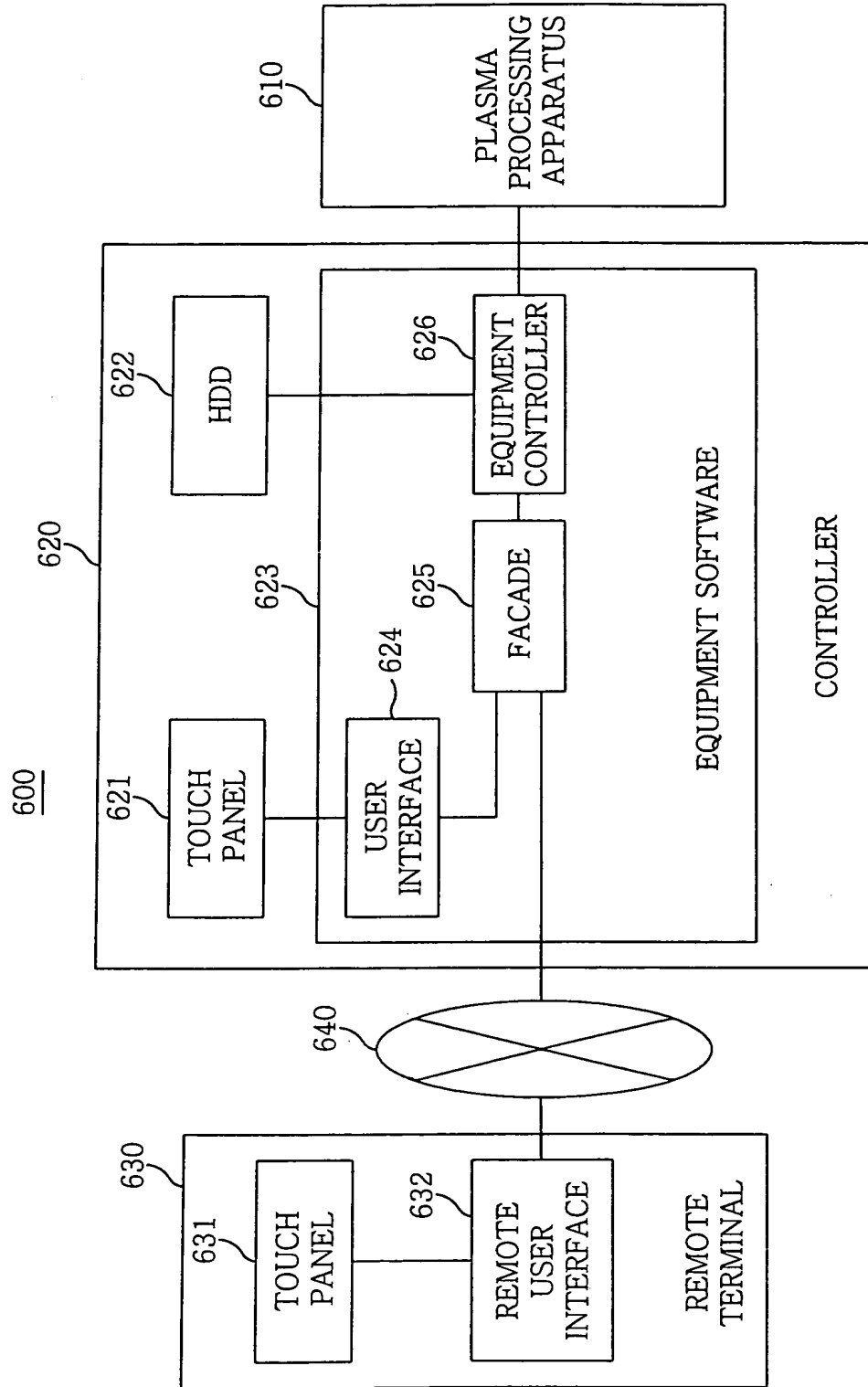


FIG. 7

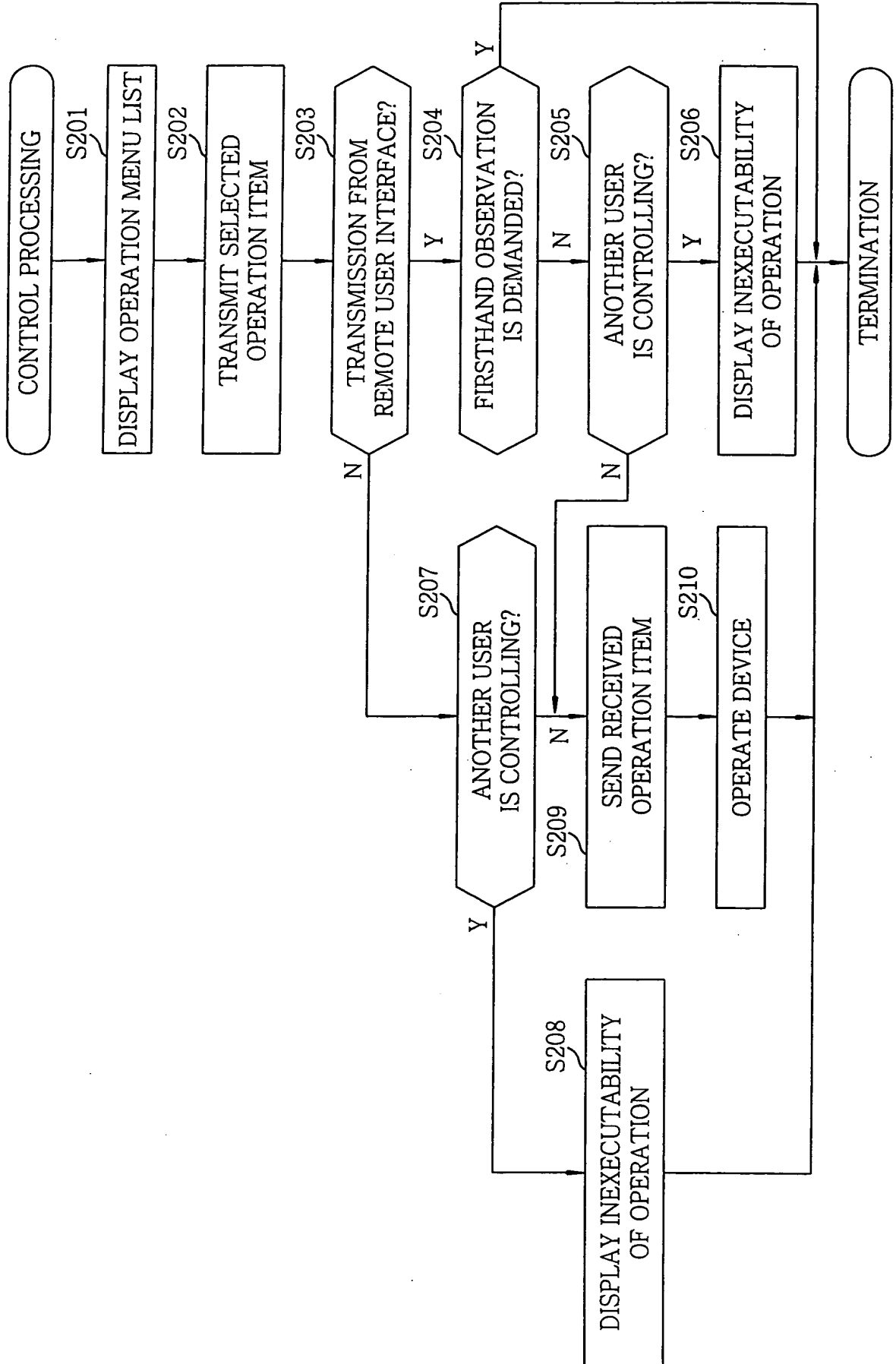


FIG. 8

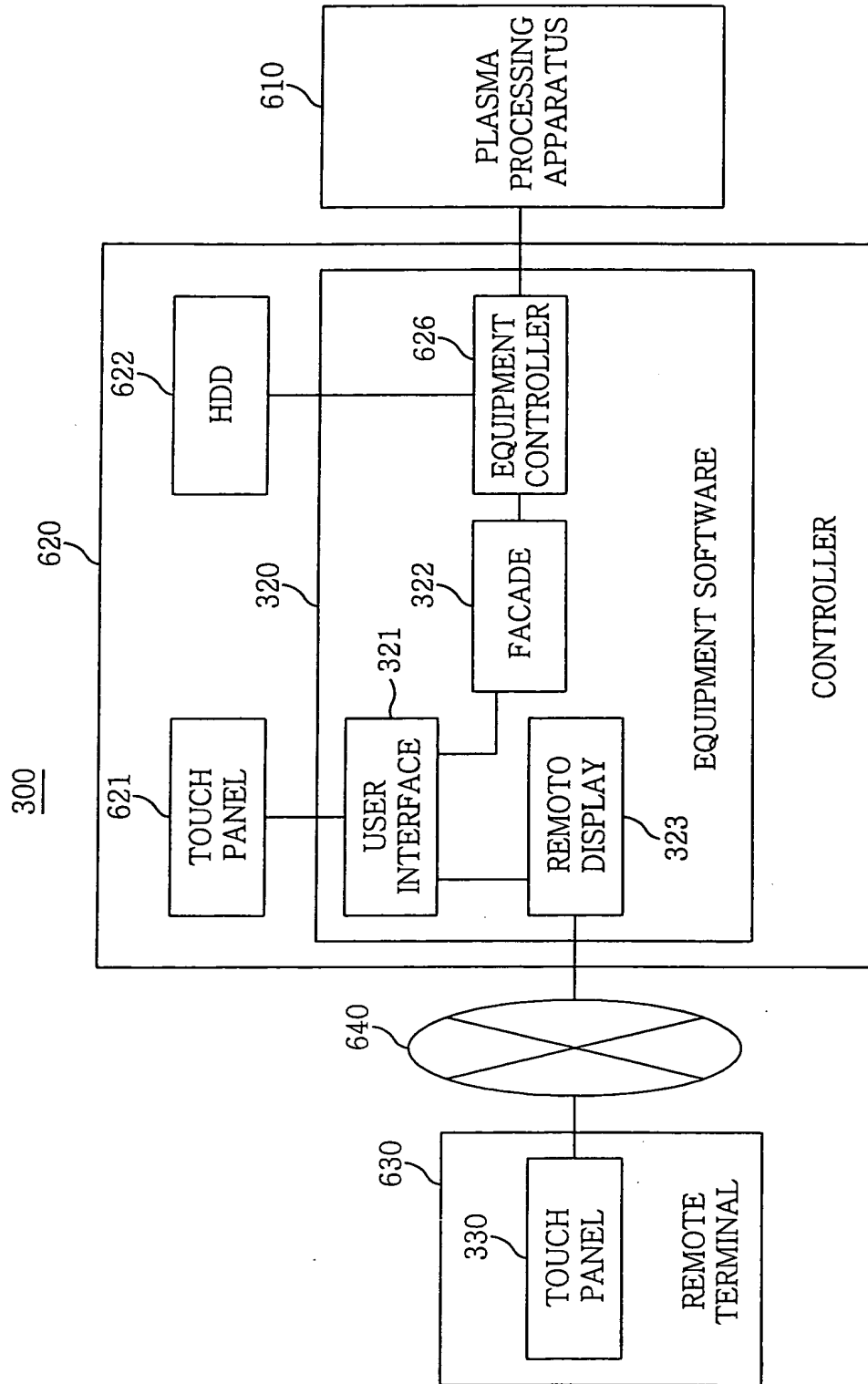


FIG. 9

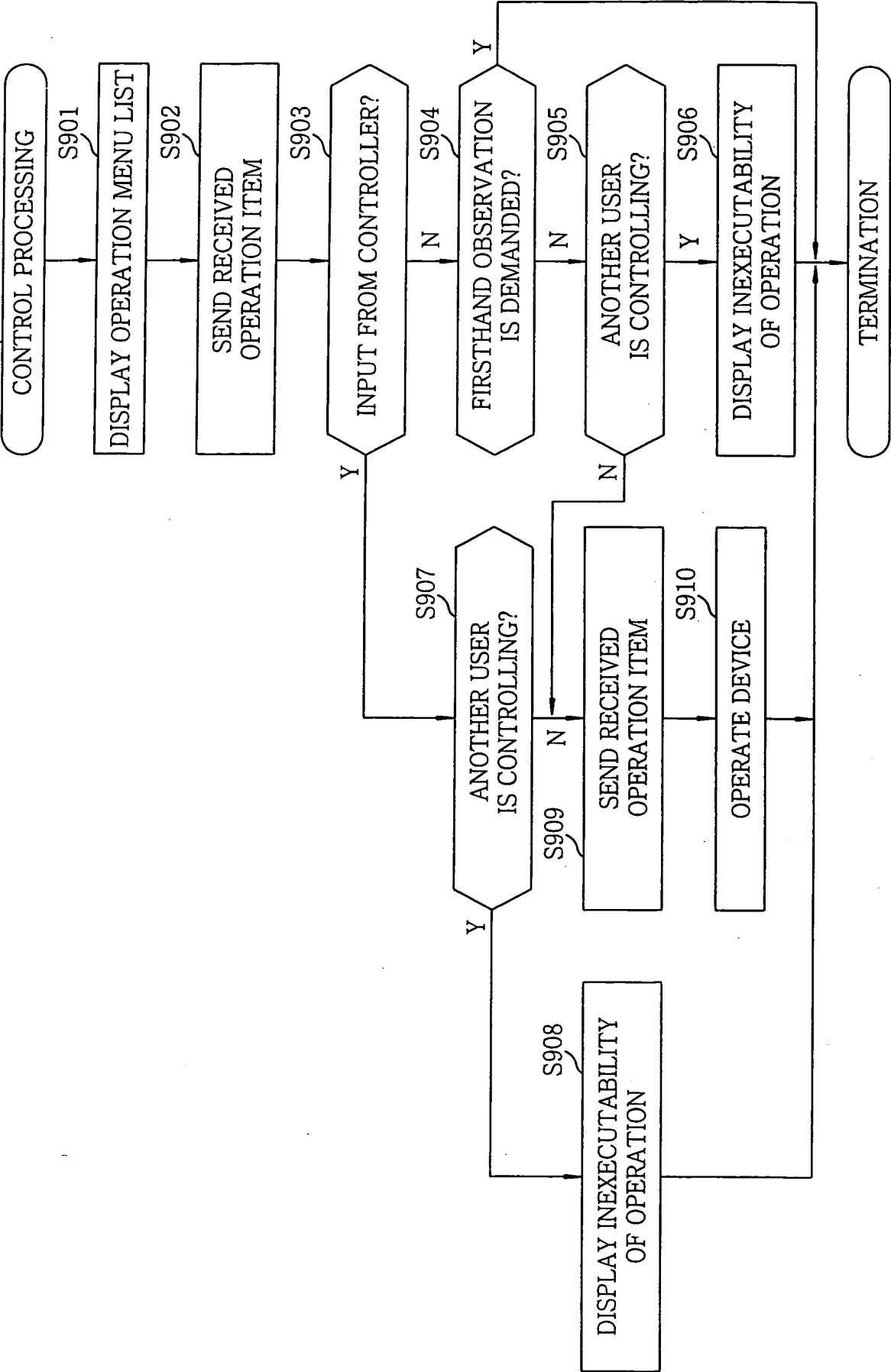


FIG. 10

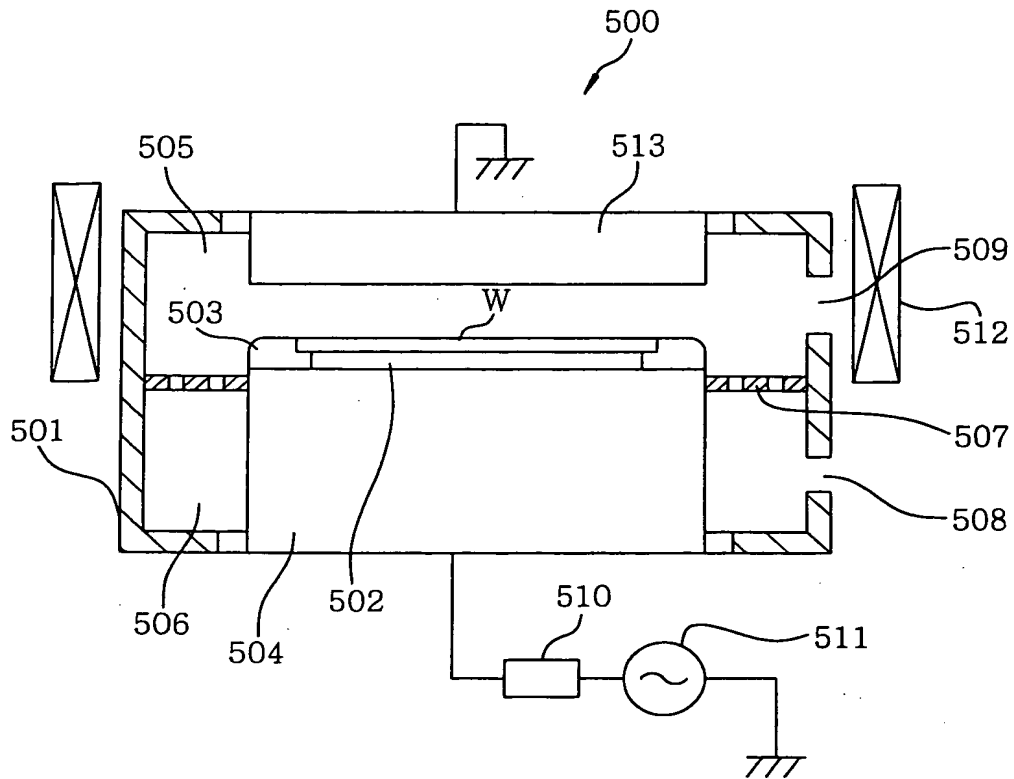


FIG. 11

